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5947 (PC17504)

**Amendments to the Claims:**

1. (Cancelled)
2. (Previously presented) An isolated and purified DNA sequence that hybridizes to the DNA sequence shown in SEQ ID NOS 3 under high stringency hybridization conditions, wherein said isolated and purified DNA sequence encodes a polypeptide that is a voltage activated calcium channel  $\alpha 2\delta$ -C subunit, and wherein said high stringency hybridization conditions comprises hybridization on a filter support at 65 °C in 7% SDS and 0.125 M sodium phosphate, followed by washing in 1% SDS, 20 mM phosphate buffer and 1 mM EDTA at 65 °C for between about 30 minutes to 4 hours.
3. (Previously presented) An isolated and purified DNA sequence that consists essentially of the DNA sequence shown in SEQ ID NOS NO: 3.
4. (Cancelled)
5. (Previously presented) An isolated and purified DNA sequence that is fully complementary to the DNA sequence shown in SEQ ID NOS 3.
6. (Previously presented) A recombinant DNA molecule comprising the isolated and purified DNA sequence shown in SEQ ID NOS 3, wherein said isolated and purified DNA sequence encodes a polypeptide that is a voltage activated calcium channel  $\alpha 2\delta$ -C subunit.
7. (Previously presented) A recombinant host cell comprising a host cell transfected with the recombinant DNA molecule of claim 2.

Claims 8-14 (Cancelled)

15. (Cancelled)

16. (Cancelled)

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**Claims 17- 20 (Cancelled)**

**21. (Previously presented) A method for purifying  $\alpha 2\delta$ -C protein from cells, comprising:**

- a) transfecting a host cell with a vector comprising the isolated and purified DNA sequence of Claim 2 or 3 operatively linked to a promoter capable of directing gene expression in a host cell;**
- b) inducing expression of the isolated and purified DNA sequence in the cells;**
- c) lysing the cells;**
- d) isolating  $\alpha 2\delta$ -C protein from the cells ; and purifying  $\alpha 2\delta$ -C protein from the isolate.**

**Claims 22- 34 (Cancelled)**

**35. (Previously presented) An isolated and purified DNA sequence consisting of a sequence which encodes a polypeptide of SEQ ID NO: 5.**

**36. (Previously presented) An isolated and purified DNA sequence, which comprises a polynucleotide sequence encoding a polypeptide of SEQ ID NO: 5.**

**37. (New) An isolated and purified DNA sequence that consists of the DNA sequence shown in SEQ ID NO: 3.**